



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/647,474	08/26/2003	Hiroyuki Nagano	2003_1209A	2306

513 7590 09/25/2006

WENDEROTH, LIND & PONACK, L.L.P.
2033 K STREET N. W.
SUITE 800
WASHINGTON, DC 20006-1021

EXAMINER

POULOS, SANDRA K

ART UNIT	PAPER NUMBER
----------	--------------

1714

DATE MAILED: 09/25/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/647,474

Applicant(s)

NAGANO ET AL.

Examiner

Sandra K. Poulos

Art Unit

1714

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 July 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) 8-11 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

1. Applicant's election of Claims 1-7 in the reply filed on 7/17/06 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

Claims 8-11 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected inventions, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 7/17/06.

Specification

2. It is unclear if DISPALON® AQ-600 is misspelling of DISPARLON® AQ-600 (see attached sheet). Clarification is requested.

Claim Objections

3. Claims 2-7 are objected to because of the following informalities: The first word "A" should be replaced with "The" in order to maintain proper antecedent basis. Appropriate correction is required.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Art Unit: 1714

Claims 1-7 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 is indefinite because it is unclear whether “the paint liquid” is the same as either the “water-based paint” or “water-based metallic paint”.

Claim 6 recites an improper Markush group. The proper phraseology is “selected from the group consisting of”.

Claims 2-5 and 7 are rejected under 35 U.S.C. 112, second paragraph, as being dependent upon a rejected base claim.

Claim Rejections - 35 USC § 102/103

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was

Art Unit: 1714

not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. Claims 1, 3-7 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Wakui (US 5,994,494).

Wakui discloses polyamide anti-settling agents for aqueous metallic paints (col 1, lines 4-9; col 4, lines 8-16). The polyamide has little crystallinity but is a solid at room temperature and is dispersed in a medium composed mainly of water (col 3, lines 1-4). The metallic pigments are aluminum pigments and pearlescent pigments such as mica (col 4, lines 8-16). The amount of antisetling agent is 0.25 to 5%, particularly 0.5 to 3% by weight in terms of the polyamide based on the paint vehicle (col 4, lines 24-28).

The inventive example discloses 44.1 parts water soluble acrylic resin, 6.4 parts melamine resin, 49.5 parts deionized water, 5.0 parts metallic pigment, and 2.0 parts polyamide antisetling agent (col 8, lines 30-40). In this example the polyamide is calculated to be present in about 4.5 parts by weight per 100 parts of the resin (acrylic resin) and corresponding in an amount of 1.9 wt% of the total composition. The polyamide is agent is 0.25 to 5 wt% of the total composition. Based on the above example, when the polyamide is in the range of 0.25 to 5 wt% total composition, this corresponds to 0.6 to 12.5 parts by weight per 100 parts of the acrylic resin. The amount of metallic pigment is present at 5.0 parts, which is equivalent to 11.3 parts based on 100 parts acrylic resin.

Although Wakui is silent with respect to the storage modulus of elasticity of the paint, the paint composition is substantially similar to the currently claimed paint

Art Unit: 1714

composition, they both contain a water based metallic paint with polyamide, acrylic resin, and melamine resin, with a metallic pigment in the currently claimed ranges; thus it is examiner's position that although it is not specifically recited, the paint composition disclosed by Wakui would nonetheless inherently meet the requirements for the currently claimed storage modulus of elasticity, or alternatively, would obviously have been present in the Wakui paint product, absent evidence to the contrary.

Claim Rejections - 35 USC § 103

6. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wakui as applied to claims 1, 3-7 above, and further in view of Kusumoto Chemicals (DISPARLON information sheet).

The discussion with respect to Wakui in paragraph 5 above is incorporated herein by reference.

Although Wakui discloses polyamide anti-settling agent, he does not disclose a polyamide wax.

Kusumoto discloses Disparlon, a compound based on an amine salt of a polyamide wax designed for water based systems. Disparlon interacts with resins to form a thixotropic structure to prevent pigments from settling or hard caking. Disparlon is dispersed into water based paints and demonstrate a strong anti-settling effect without a loss of film gloss. The additive level is 1.0 to 3.0% wt% of the total paint. The Disparlon is added to an aqueous metallic paint composition with acrylic resin, melamine resin, and pigment particles.

Art Unit: 1714

It would have been obvious to one of ordinary skill in the art to use Disparlon as the polyamide anti-settling agent in Wakui because it not only demonstrates a strong anti-settling effect, which is an important point in the Wakui reference, but additionally results in no loss of film gloss, which would also be beneficial for a paint such as Wakui's.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.


- JP 10328615 discloses a metallic paint with acrylic and melamine resin.
- US 4,324,711 and US 6,069,275 and US 2002/0082344 disclose paint compositions.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sandra K. Poulos whose telephone number is (571) 272-6428. The examiner can normally be reached on M-F 8:00-4:30 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on (571) 272-1119. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


Sandra K. Poulos


VASU JAGANNATHAN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1700